ACTA DIABETOLOGICA LATINA Vol. XXVI

ACTA DIABETOLOGICA LATINA

Editor-in-chief

GUIDO POZZA, Milano

Editorial Advisory Council

L. ADEZATI, Genova
D. ANDREANI, Roma
G. D. BOMPIANI, Palermo
G. F. BOTTAZZO, London
P. BRUNETTI, Perugia
U. BUTTURINI, Parma
C. CAPELLA, Varese
W. CREUTZFELDT, Göttingen
D. FEDELE, Palermo
P. FOÀ, Detroit
G. GALLUS, Milano
H. KEEN, London
P. LEFÈBVRE, Liège
A. LOMBARDO, Milano
R. LUFT, Stockolm
H. MEHNERT, München
G. MENZINGER, Roma
G. M. MOLINATTI, Torino
L. MOTTA, Catania
R. NAVALESI, Pisa
G. PAGANO, Torino
E.F. PFEIFFER, Ulm
P. POLOSA, Catania
S. RAPTIS, Athenai
G. TCHOBROUTSKY, Paris
A. TIENGO, Padova
PH. VAGUE, Marseille
G. C. VIBERTI, London
W. WALDHÄUSL, Wien
B. L. WAJCHENBERG, São Paulo
R. S. YALOW, New York

Editorial Board

ENZO BONORA, Verona - PAOLO CAVALLO PERIN, Torino - UMBERTO IANNACCONE, Roma - ROMANO NOSADINI, Padova
ANGELA RIVELLESE, Napoli

Managing Editor

FRANCESCO CAVIEZEL, Milano

Publication data: The Journal appears four times a year; four issues constitute one volume. Supplements (monographs or conference proceedings) are published occasionally.
Subscription price per volume US $ 150.00 (Lit. 200,000) including postage by surface mail.
If required, issues can be sent by air mail at an extra charge of US $ 15.00 (Lit. 20,000) per volume and US $ 4.00 (Lit. 5,000) per single issue.
Price per single issue US $ 37.50 (Lit. 50,000).
Special price, only for Members of Diabetology and Endocrinology Societies, US $ 50.00 (Lit. 50,000) per volume.
Prices quoted do not include supplements.

Advertising: orders for advertisements should be sent to the publisher.

Books for review: books for review should be sent to the publisher.

Subscriptions: subscription orders can be placed with any bookstore or addressed to the publisher.

© All rights, including that of translation into other languages, reserved.
Photomechanic reproduction (photocopy, microcopy) of this volume or parts thereof without special permission of the publisher is prohibited.
Copyright 1989 by Casa Editrice «il Ponte» Casella Postale 1071 - 20101 Milano, Italy.

Member of «Unione Stampa Periodica Italiana»

ACTA DIABETOLOGICA LATINA

VOLUME XXVI 1989

R. Luft: 'Αχαδήμεια and Φιλοσοφία today . . . . . I (Issue nº 1)

ORIGINAL CONTRIBUTIONS

R. Ebert, W. Creutzfeldt: Gastric inhibitory polypeptide (GIP) hypersecretion in obesity depends on meal size and is not related to hyperinsulinemia 1

A. Czyzyk, H. Rogala, J. Ławecki: Controlled study comparing treatment with monocomponent insulin and conventional insulin in patients with lipoatrophy 17

D. G. Lambert, T. W. Atkins: Cholinergic stimulation of insulin release from cloned B-cell lines HIT-T15 and RINm5F 27

U. J. W. Schauer, D. Pissarek, G. Panzram: Association of coronary heart disease with serum lipid and apolipoprotein concentrations in long-term diabetes. Results of the Erfurt study 35

R. Jablenska, V. Ogneva, P. Petkov: Effects of cyclosporin A on the endocrine pancreas of the rat. Morphological and immunohistochemical studies 43

J. O. Akpan: A comparison of maternal and cord blood glucose levels in diabetic and non-diabetic Nigerians in relation to birth weight and maternal body mass index 95

J. C. Cresto, M. Del Carmen Camberos, V. D'Alessandro, J. C. Basabe: Internalization and release of insulin from hepatocytes 103

E. R. Richens, A. Shaltout, G. M. Bahr, N. Abdella, A. K. Jayyab, M. Al-Saffar, K. Behbehani: Insulin binding substances, autoimmunity and type I diabetes in Kuwaiti patients and their kindred 115

A. Ramachandran, L. Susheela, V. Mohan, D. A. S. Kuzhali, M. Viswanathan: Decreased insulin binding in Asian Indian women with gestational diabetes mellitus 123

F. Caviezel, G. Lepore, M. L. Maglio, M. Croci, G. Comi, L. Morricone: Clinical and pharmacological characterization of anomalous metoclopramide-induced growth hormone secretion in insulin-dependent diabetes mellitus 133

A. Ceriello, D. Giugliano, A. Quatraro, A. Stante, P. Dello Russo, R. Torella: Increased alpha$_2$-macroglobulin in diabetes: a hyperglycemia related phenomenon associated with reduced antithrombin III activity 147

C. De Palo, C. Macor, N. Sicolo, R. Vettor, C. Scandellari, G. Federspil: Dietary-induced thermogenesis in obesity. Response to mixed and carbohydrate meals 155

R. Miccoli, O. Giampietro, G. Penno, G. Odello, R. Anichini, A. Bertolotto, L. Cruschelli, S. Bertoli, R. Navalesi: 'Microalbuminuria' in type I (insulin-dependent) diabetic patients with and without retinopathy 163

P. Khalid, F. Ahmad, M. M. Khan, A. K. Rastogi, J. R. Kidwai: Effect of age on the binding of lectin ^{125}I-PHA-B to pancreatic islets of rat *in vitro* and stimulation of some cellular events 171

M. C. Foss, L. N. Cunningham, T. T. Aoki: Hormone-fuel metabolism during exercise of insulin-dependent diabetic patients treated with an artificial B-cell unit 185

J. O. Akpan: Reduction in blood and urine glucose levels in streptozotocin and alloxan diabetes by phenazine methosulfate 195

P. Khalid, S. Chaturvedi, M. M. Khan, A. K. Rastogi, B. Kundu, F. Ahmad, K. B. Mathur, J. R. Kidwai: Effect of some novel synthetic analogues of CCK-4 on insulin and glucagon secretion 203

A. Lapolla, P. Tessari, A. Franchin, C. Gerhardinger, A. Valerio, N. Proto, D. Fedele: Red cell sorbitol concentration in relation to short- and medium-term variation of plasma glucose 211

G. M. Nardelli, E. Guastamacchia, S. Di Paolo, A. Balice, M. Rosco, G. Santoro, G. Lollino, R. Giorgino: Somatomedin-C (SM-C). Study in diabetic patients with and without retinopathy 217

A. Piaggesi, O. Giampietro, L. Picaro, R. Miccoli, R. Navalesi: Individual teaching as a first-step intervention for the education of diabetic subjects 225

R. Silvestri, A. Lasco, L. Marabello, R. M. Puglisi, C. Casella, D. Cucinotta, O. Manganaro, N. Frisina, R. Di Perri: Wake and sleep cardiovascular reflex tests and GH profiles in diabetic patients 237

A. Giardullo, L. Ricordi, M. Rossi, G. Marti, G. Vandelli, P. Fratino, L. Bernardi: Relationship between retinal ischemia and cardiovascular autonomic damage in diabetes 245

A. Secchi, F. Crosti, L. Bonisolli, D. Pavoni, F. Capra, P. Navone, A. E. Pontiroli, M. Bellone, C. Rugarli, G. Pozza: Impairment of lymphocyte suppressive system in recent onset insulin-dependent diabetes mellitus. Correlation with blood glucose and serum insulin levels 257

K. W. Small, E. Stefansson, D. L. Hatchell: Coronary blood flow in chronic insulin-dependent diabetic dogs 275

J. B. Garcia, M. C. Venturino, G. Devesa, J. C. Basabe: Insulin secretion induced by alloantigens. Mechanisms of action 283

F. Ahmad, P. Khalid, M. M. Khan, A.K. Rastogi, J.R. Kidwai: Insulin like activity in (–) epicatechin 291

A. Renauld, R. C. Sverdlik: Influence of exogenous ATP on blood sugar, serum insulin and serum free fatty acids in short-term experimental hyperthyroid dogs and in euthyroid controls 301

S. Donev, P. Petkov, G. Marquié, J. Duhault, R. Jablenska: Immunohistochemical investigations of the endocrine pancreas in normoglycemic sand rats (*Psammomys obesus*) . . 309

M. Suhail, S. I. Rizvi: Effect of type I (insulin-dependent) diabetes mellitus on key glycolytic enzymes of red blood cells 315

C. Gazzarrini, N. Stagni, P. Pollesello, P. D'Andrea, B. De Bernard: Possible mechanism of inhibition of cartilage alkaline phosphatase by insulin 321

G. Gelmini, V. Coiro, C. Manotti, R. Delsignore, M. Passeri: Effect of diet and weight loss on whole blood filterability and plasma fibrinogen values in hypertensive obese postmenopausal women 329

G. Ben, S. Dal Fabbro, A. Mongillo, P. Pellegrini, D. Fedele: Does ethanol intake interfere with the evaluation of glycated hemoglobins? 337

SHORT COMMUNICATION

S. K. Swanston-Flatt, C. Day, C. J. Bailey, P. R. Flatt: Evaluation of traditional plant treatments for diabetes: studies in streptozotocin diabetic mice 51

REVIEW

G. Pozza, V. Di Carlo: Pancreas transplantation in diabetic patients 57

CASE REPORTS

T. Scalvini, S. Spandrio, O. di Stefano, M. C. Cotelli, G. Carella, G. P. Balestrieri: Severe microvascular disease in type II diabetes of early onset. A family study 69

D. Bruttomesso, G. Lisato, S. Del Prato, A. Tiengo: 'Do-it-yourself' insulin pump. Case report 75

V. Mohan, A Ramachandran, M. Viswanathan: Two case reports of macrovascular complications in fibrocalculous pancreatic diabetes 345

HISTORICAL NOTE

F. S. Keck, E. F. Pfeiffer: The first experimental diabetes mellitus 79

LETTERS TO THE EDITOR

O. Giampietro, G. Santoro, R. Navalesi: Vectorcardiographic 'bites' in diabetes mellitus 83

E. Vitolo, S. Madoi, C. Sponzilli, M. Palvarini, D. Silvestri, D. Castini, A. Morabito: Vectorcardiographic 'bites' in diabetes mellitus. Reply 84

OBITUARIES

G. Lenti 87

S. Marigo 88

S. Signorelli 265

BOOK REVIEWS

Strasser T., Ganten D. (Eds): Mild hypertension. From drug trials to practice 89

Weber B. (Ed.): Early vascular complications in children with diabetes mellitus 89

Dammacco F. (Ed.): Immunologia in medicina 181

Sussman K. E., Draznin B., James W. E. (Eds): Clinical guide to diabetes mellitus . . . 182

Chang A. Y., Diani A. R. (Eds): Pathogenesis and new approaches to the study of noninsulin-dependent diabetes mellitus 267

Grill V., Efendić S. (Eds): Pathogenesis of non-insulin-dependent diabetes mellitus . . 267

Tiengo A., Alberti K. G. M. M., Del Prato S., Vranic M. (Eds): Diabetes secondary to pancreatopathy 269

Creutzfeldt W., Lefèbvre P. J. (Eds): Diabetes mellitus: pathophysiology and therapy 351

Hare J. W. (Ed.): Diabetes complicating pregnancy. The Joslin Clinic method 351

MacLennan W. J., Peden N. R.: Metabolic and endocrine problems in the elderly . . . 351

NEWS

- BIOTECH RIA 1989 91
- EASD European Diabetes Epidemiology Study Group 91
- EASD European Diabetic Nephropathy Study Group 91
- 5th European Symposium on Metabolism 91
- VII Congresso Nazionale Associazione Medici Diabetologi 92
- Giornate Endocrinologiche Pisane 92
- 49th Annual Meeting of the American Diabetes Association 92
- 7th International Symposium on Diabetes and Nutrition 92
- XIIth International Conference on Preventive and Social Medicine 92
- 25th Annual Meeting of the EASD 93
- 15th World Congress of the International Union of Angiology 93
- Biosensors 1989 93
- Drug Delivery and Drug Targeting Systems. Latest Advances 93
- Current and Future Prospects in the Drug Treatment of Obesity 94
- Joint International Meetings 94
- 14th International Congress on Nutrition 183
- Conference on Insulin (20th Anniversary of Insulin Crystal Structure Determination) 183
- The 2nd Roma Nephrology Conference on Proteinuria 183
- 7th International Meeting on Atherosclerosis and Cardiovascular Disease 183
- Sesto Congresso Nazionale della Società Italiana di Ipertensione Arteriosa 183
- 34° Congresso Nazionale della Società Italiana di Gerontologia e Geriatria 183
- 3rd Joint Meeting of the European Society for Paediatric Endocrinology 183
- Diabetes Mellitus in Europe: a Problem at all Ages in all Countries 184
- XC Congresso della Società Italiana di Medicina Interna 184
- 7° Congresso Nazionale della Società Italiana di Endocrinologia e Diabetologia Pediatrica 184
- Developmental Endocrinology 184

- The Second International Symposium on Diabetes and Pregnancy 184
- XX International Congress of Internal Medicine 184
- 7° Congresso Nazionale della Società Italiana di Endocrinologia e Diabetologia Pediatrica 271
- 2nd International Symposium on Diabetes and Pregnancy 271
- Amino Acid/Protein Metabolism in Health and Disease 271
- 9th Workshop on 'Artificial Insulin Delivery Systems, Pancreas and Islet Transplantation' 271
- International Symposium on 'Lipoprotein Metabolism and Lipid Lowering Agents' . . 271
- Update on Diabetes in Childhood 272
- 24th Annual Scientific Meeting of the European Society for Clinical Investigation . . 272
- 2nd Cyprus International Post-Graduate Course in Diabetes Mellitus 272
- 3rd National Meeting on the Diabetic Foot 272
- Diabetes Macroangiopathy - Satellite Symposium to the ISIM' 90 Congress 272
- 6th Meeting of the International Study Group on Diabetes Treatment with Implantable Insulin Delivery Devices 273
- IV International Symposium on Insulin Receptor and Insulin Action - Molecular and Clinical Aspects 273
- 2nd International Symposium on 'Immunotherapy of Type I Diabetes' 273
- 26th Congress of the European Association for the Study of Diabetes 273
- 3rd International Workshop on Lessons from Animal Diabetes, Part II 273
- 6th International Congress on Obesity 273
- European Congress on Geriatric Treatment: 'The Elderly at Risk' 353
- XIII National Congress of the Italian Society of Diabetology 353
- Iodine and the Thyroid 353
- International Sardinian Congress on Pediatric Endocrinology 353
- Endocrinology Under 35 354
- International Symposium on Regional Fat Distribution and Morbidity 354

ACKNOWLEDGEMENTS 355

INDEX 1989

AUTHOR INDEX 359

SUBJECT INDEX 363